



PTO/SB/08A (08-03)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	10/643254
		Filing Date	August 18, 2003
		First Named Inventor	KEVIN CRATHER ET. AL.
		Group Art Unit	Unknown
		Examiner Name	Unknown
Sheet 1 of 2	Attorney Docket Number	CL1610USNA	

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)				
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FOREIGN PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	Foreign Patent Document CountryCode ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ₆
JES		DD 253 244 A1	01-13-1988	LOTHAR et al.		<input type="checkbox"/>
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Examiner Signature	<i>Joseph Seal</i>	Date Considered	6/21/06
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STATEMENT BY APPLICANT**

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Sheet 2 of 2

Complete if Known

Application Number	10/643254
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Group Art Unit	Unknown
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		Number - Kind Code ² (if known)				
KQ		US -	5,698,237 A	12-16-1997	BACHER et al.	
		US -	5,895,617 A	04-20-1999	MIZUGUCHI et al.	
		US -	5,942,170 A	08-24-1999	PEITZ	
		US -	6,143,221 A	11-07-2000	GUROL	
		US -	6,267,575 A	07-31-2001	ROOYAKKERS et al.	
		US -	6,379,137 B1	04-30-2002	ECKER	
		US -	6,508,807 B1	01-14-2003	YANAGIHARE et al.	
		US -	6,592,350 B1	07-15-2003	CHSZANIECKI	
		US -	6,551,643 B1	04-22-2003	BERNATZ et al.	
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Joseph S. Del Sole

Date
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First Named Inventor

KEVIN CRATHER ET. AL.

Group Art Unit

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Attorney Docket Number

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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JS		WILLER DE OLIVEIRA ET AL., Journal of Applied Polymer Science, vol. 8:63-73, 1996, Hydrogels From Polysaccharides I Cellulose Beads for Chromatographic Support	<input type="checkbox"/>
		HARRY R. BRANDENBERGER ET AL., Biotechnol. Prog., vol. 15:366-372, 1999, Immobilization of Highly Concentrated Cell Suspensions Using the Laminar Jet Breakup Technique	<input type="checkbox"/>
		MICHAEL Z.-C. HU ET AL., Biotechnol. Prog., vol. 13:60-70, 1997, Biosorption of Uranium by Pseudomonas aeruginosa Strain CSU Immobilized in a Novel Matrix	<input checked="" type="checkbox"/>
		J. TRAMPER, Trends in Biotechnology, vol. 3:45-50, 1985, Immobilizing Biocatalyst for Use in Syntheses	<input type="checkbox"/>
		ULF PRÜBE ET AL., Biotechnology Techniques, vol. 12, no. 3:105-108, 1998, The Jet Cutting Method as a New Immobilization Technique	<input type="checkbox"/>
✓		DOUGLAS. B. SEIFERT ET AL., Biotechnol. Prog., vol. 13:562-568, 1997, Production of Small, Monodispersed Alginate Beads for Cell Immobilization	<input type="checkbox"/>
JS		S. F. D'SOUZA, Indian J. Microbil., vol. 29(2):83-117, 1989, Immobilized Cells: Techniques and Applications	<input type="checkbox"/>
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